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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,117	04/30/2001	Derek Leigh Lownsbrough	011.0201.01	5237

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EXAMINER

OSMAN, RAMY M

ART UNIT PAPER NUMBER

2157

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,117

Applicant(s)

LOWNSBROUGH ET AL.

Examiner

Ramy M Osman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-38 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to amendment filed 10/91/2004. Claims 1-38 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1-38 rejected under 35 U.S.C. 102(e) as being anticipated by Emens et al (US Patent No. 6,606,643).

4. In reference to claim 1, Emens teaches a system for efficiently forwarding client requests in a distributed computing environment, comprising:

a socket receiving a plurality of non-proxiable requests commonly addressed to an origin server from individual sending clients (column 3 lines 25-45 and column 4 lines 30-35);

a time estimates generator dynamically generating, concurrent to and during processing of each request, time estimates of service availability based on a time-to-idle for sending the requests over each of a plurality of network connections to the origin server (column 3 lines 50-67 and column 9 lines 15-45); and

a network connection manager selecting the network connection to the origin server with a substantially highest service availability and a substantially lowest time-to-idle and forwarding each request to the origin server using the selected network connection (column 3 line 65 – column 4 line 25 and column 9 lines 35-67).

5. In reference to claim 2, Emens teaches a system according to Claim 1, further comprising:

the network connection manager selecting a network connection not actively sending a request with a zero time-to-idle and not subject to a slow start overhead incurred responsive to flow control imposed by the sending client (column 3 line 65 – column 4 line 25 and column 9 lines 35-67).

6. In reference to claim 3, Emens teaches a system according to Claim 2, further comprising: the network connection manager selecting a network connection actively sending a request with a time-to-idle less than the slow start overhead, plus request transfer time if the network connection is pipelined (column 10 lines 1-30).

7. In reference to claim 4, Emens teaches a system according to Claim 3, further comprising: the network connection manager selecting a network connection not actively sending a request with a zero time-to-idle and subject to the slow start overhead (column 10 lines 1-30).

8. In reference to claim 5, Emens teaches a system according to Claim 4, further comprising: the network connection manager selecting a network connection actively sending a request with a time-to-idle less than a network connection setup overhead, plus request transfer time if the network connection is pipelined (column 10 lines 40-67).

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9. In reference to claim 6, Emens teaches a system according to Claim 5, further comprising: the network connection manager selecting a new network connection in the absence of an existing network connection with a time-to-idle less than the network connection setup overhead (column 9 lines 30-60).

10. In reference to claim 7, Emens teaches a system according to Claim 5, further comprising: the network connection manager selecting an existing network connection with the substantially lowest time-to-idle (column 9 lines 30-60).

11. In reference to claim 8, Emens teaches a system according to Claim 1, wherein the distributed operating environment is TCP/IP-compliant, the system further composing: the time estimates generator providing time estimates for each network connection comprising at least one of TCP overhead, time-to-idle, idle time, and request transfer time (column 3 line 65 – column 4 line 25 and column 9 lines 35-67).

12. In reference to claim 9, Emens teaches a system according to Claim 8, the network connection setup overhead comprises TCP overhead, the system further comprising: the time estimates generator calculating the TCP overhead by adding a three-way handshake overhead to a slow start overhead (column 11 line 40 – column 12 line 15).

13. In reference to claim 10, Emens teaches a system according to Claim 8, further comprising: the time estimates generator calculating the request transfer time by multiplying the size of the request by an average network connection speed for the origin server (column 9 lines 45-67).

14. In reference to claim 11, Emens teaches a system according to Claim 8, further comprising: the time estimates generator calculating the time-to-idle upon each receipt of a

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request by adding the time-to-idle to the product of an average network connection speed for the origin server multiplied by the sum of the request size and an estimated response size (column 10 lines 5-45).

15. In reference to claim 12, Emens teaches a system according to Claim 8, further comprising: the time estimates generator calculating the time-to-idle upon writing data to a socket by subtracting the time-to-idle from the product of an average network connection speed for the origin server multiplied by the amount of data written (column 9 lines 15-67).

16. In reference to claim 13, Emens teaches a system according to Claim 8, further comprising: the time estimates generator calculating the time-to-idle upon reading data from a socket, prior to header data, by subtracting the time-to-idle from the product of an average network connection speed for the origin server multiplied by the amount of data read (column 9 lines 15-67).

17. In reference to claim 14, Emens teaches a system according to Claim 1, further comprising: a proxy configured in a location comprising at least one of local to the sending clients, in the infrastructure of the distributed computing environment, and local to the origin server (column 10 lines 40-67).

18. Claims 15-38 teach a corresponding method which is identical to each of the respective system claims of 1-14 and do not teach or define any new limitations. They are therefore rejected for similar reasons.

Response to Arguments

19. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

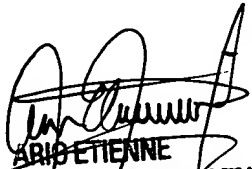
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
February 22, 2005


ARIO ETIENNE
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